

WHAT IS CLAIMED IS:

1. An image forming apparatus having an image carrier, and a developing unit for forming an image by supplying a developer onto the image carrier, the
5 apparatus comprising:
consumption amount detecting unit configured to detect an amount of consumed developer in a case where an amount of usage of the developing unit has reached a predetermined amount; and
10 control unit configure to perform an operation of adhering the developer to the image carrier,
wherein said control unit changes an amount of the developer to be adhered to the image carrier in accordance with the amount of the consumed developer
15 detected by said consumption amount detecting means.
2. The apparatus according to claim 1, wherein said control unit changes the amount of the developer to be adhered to the image carrier on the basis of the amount
20 of the consumed developer detected by said consumption amount detecting means and a predetermined threshold value.
3. The apparatus according to claim 2, wherein the
25 predetermined threshold value corresponds to a characteristic of the developer.

4. The apparatus according to claim 1, wherein said control unit changes the amount of the developer to be adhered to the image carrier in accordance with an environment of the developing unit.

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5. The apparatus according to claim 1, wherein said control unit changes the amount of the developer to be adhered to the image carrier in accordance with conditions in which the developing unit operates.

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6. The apparatus according to claim 1, wherein said control unit changes a driving time of the developing unit in accordance with a color of the developer.

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7. An image forming apparatus having an image carrier, and a developing unit for forming an image by supplying a developer onto the image carrier, the apparatus comprising:

consumption amount detecting unit configured to
20 detect an amount of consumed developer in a case where an amount of usage of the developing unit has reached a predetermined amount; and

control unit configured to drive the developing unit,

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wherein said control unit changes a driving time of the developing unit in accordance with the amount of the consumed developer detected by said consumption

amount detecting unit.

8. The apparatus according to claim 7, wherein said control unit changes the driving time of the developing
5 unit on the basis of the amount of the consumed developer detected by said consumption amount detecting unit and a predetermined threshold value.

9. The apparatus according to claim 7, wherein the
10 predetermined threshold value corresponds to a characteristic of the developer.

10. The apparatus according to claim 7, wherein said control unit changes the driving time of the developing
15 unit in accordance with an environment of the developing unit.

11. The apparatus according to claim 7, wherein said control unit changes the driving time of the developing
20 unit in accordance with conditions in which the developing unit operates.

12. The apparatus according to claim 7, wherein said control unit changes the driving time of the developing
25 unit in accordance with a color of the developer.

13. The apparatus according to claim 7, wherein the

developing unit comprises a developer carrier which supplies the developer onto the image carrier, and said control unit drives the developer carrier.

- 5 14. A method of adjusting a developing unit in an image forming apparatus having an image carrier, and the developing unit for forming an image by supplying a developer onto the image carrier,

the method comprising:

- 10 a consumption amount detection step of detecting an amount of consumed developer in a case where an amount of usage of the developing unit has reached a predetermined amount; and

- 15 a control step of changing an amount of the developer to be adhered to the image carrier, in accordance with the amount of consumed developer detected in said consumption amount detection step.

15. The method according to claim 14, wherein said
20 control step further comprises a step of changing the amount of the developer to be adhered to the image carrier in accordance with an environment of the developing unit.

- 25 16. The method according to claim 14, wherein said control step further comprises a step of changing the amount of the developer to be adhered to the image

carrier in accordance with conditions in which the
developing unit operates.

17. The method according to claim 14, wherein said
5 control step further comprises a step of changing the
amount of the developer to be adhered to the image
carrier in accordance with a color of the developer.

18. A method of adjusting a developing unit in an
10 image forming apparatus having an image carrier, and
the developing unit for forming an image by supplying a
developer onto the image carrier, the method
comprising:

a consumption amount detection step of detecting
15 an amount of consumed developer in a case where an
amount of usage of the developing unit has reached a
predetermined amount; and

a control step of changing a driving time of the
developing unit in accordance with the amount of the
20 consumed developer detected in said consumption amount
detection step.

19. The method according to claim 18, wherein said
control step further comprises a step of changing the
25 driving time of the developing unit in accordance with
an environment of the developing unit.

20. The method according to claim 18, wherein said control step further comprises a step of changing the driving time of the developing unit in accordance with conditions in which the developing unit operates.

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21. The method according to claim 18, wherein said control step further comprises a step of changing the driving time of the developing unit in accordance with a color of the developer.

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22. A developing unit detachable from an image forming apparatus, comprising a vessel containing a developer and a storage medium for storing information, wherein the storage medium having a storage area
15 for storing information which concerns a characteristic of the developer, and by which a control unit of the image forming apparatus controls to adjust an amount of the developer in the developing unit.

20 23. The unit according to claim 22, wherein the control is to adhere a predetermined amount of the developer onto an image carrier on the basis of an amount of consumed developer detected by a consumption amount detecting unit in a main body of the image
25 forming apparatus and the information concerning the characteristic of the developer.

24. The unit according to claim 22, further comprising a developer carrier for supplying the developer to an image carrier,

wherein the adjustment control is to drive said
5 developer carrier on the basis of an amount of consumed developer detected by a consumption amount detecting unit in a main body of the image forming apparatus and the information concerning the characteristic of the developer.

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25. A storage medium detachable from an image forming apparatus and provided in a developing unit having a vessel containing a developer, comprising:

a storage area for storing information concerning
15 to a characteristic of the developer, and so that a control unit of the image forming apparatus performs an adjustment control of an amount of the developer in the developing unit.

20 26. The medium according to claim 25, wherein the adjustment control is to adhere a predetermined amount of the developer onto an image carrier on the basis of an amount of consumed developer detected by a consumption amount detecting unit in a main body of the
25 image forming apparatus and the information concerning the characteristic of the developer, stored in said storage area.

27. The medium according to claim 25, further comprising a developer carrier for supplying the developer to an image carrier,

5 wherein the adjustment control is to drive said developer carrier on the basis of an amount of consumed developer detected by a developer consumption amount detecting unit in a main body of the image forming apparatus and the information concerning the
10 characteristic of the developer, stored in said storage area.